

## BOOK REVIEW / CRITIQUE DE LIVRE

**Scholarly Metrics under the Microscope: From Citation Analysis to Academic Auditing.** B. Cronin and C.R. Sugimoto (eds). ASIST Monograph Series; Medford, NJ: Information Today, 2015. Hardcover: 963 p. Price: USD \$149.50. ISBN 978-1-57387-499-1. Available from: <http://books.infotoday.com/asist/Scholarly-Metrics.shtml>.

Scholarly metrics and research evaluation have always been of concern for academic librarians, but in recent years this topic area has become increasingly important. Researchers are under increasing pressure to demonstrate the impact of their scholarship and university administrators need to justify the research strength of their institutions. In the 2014 *NMC Horizon Report Library Edition*, bibliometrics and citation technologies were identified as emerging areas for academic libraries [1]. As someone who has been involved in research evaluation for the past four years, I was definitely happy to learn about this book's existence.

*Scholarly Metrics under the Microscope: From Citation Analysis to Academic Auditing* is a compilation of previously published work on scholarly metrics. The book is made up of 55 research articles, essays, blogs posts, editorials, letters, and commentaries written between 1955 and 2013. Aside from the removal of some basic information such as email addresses and fax numbers, each piece appears as it originally did when first published. The book is arranged into six sections: Concepts and Theories, Validity Issues, Data Sources, Indicators, Science Policy, and Systematic Effects. An introductory chapter that describes the articles and places them in context precedes each section. The editors Cronin and Sugimoto hold positions at the School of Informatics and Computing, Indiana University Bloomington, and have extensive research backgrounds in scientometrics, citation analysis, and research evaluation. They identified a need to create a "one-stop resource that catalogues the concerns— theoretical, conceptual, methodological, and ethical— associated with the fast-expanding set of scholarly metrics now in use, under consideration, or in development" (p. 4). This book most certainly achieves this goal.

There are many excellent articles in this book that cover a large number of issues related to scholarly metrics and research evaluation. All of the major concerns and issues related to this topic are covered very well and in enough detail to provide someone new to these topics with a solid jumping off point, and someone with experience with reinforcement and enough new ideas and information for better practice. This book's major focus is on traditional metrics, but both alternative and web metrics are briefly covered. Considering librarians' interest in altmetrics, this book would benefit from more articles on this topic; however, as these are new concepts, there may have been a paucity of research in these areas at the time this book

was being developed. Hopefully, more information on altmetrics will appear in the second edition.

There are many standout pieces in the collection. I always enjoy reading any article by Eugene Garfield because of his ability to communicate complex ideas simply and intelligently, and I was very happy to see three of his papers included. W. Wayt Gibb's "Lost Science in the Third World" was an eye-opening examination of how and why research done in low- and middle-income countries faces many challenges to be included and counted. Antoinette Molinié and Geoffery Bodenhausen's "Bibliometrics as Weapons of Mass Citation" and Richard R. Ernst's "The Follies of Citation Indices and Academic Ranking Lists" discuss how the pursuit of indicators may be creating a culture where universities, funders, and researchers are living in a hyped-up competitive environment where many are trying to outdo their colleagues (or should we call them competitors). Another highlight of this book was, despite the academic nature of the topic, it never grew boring or repetitive. I found the different mix of article types (blog posts, magazine articles, academic research articles, editorials, and letters) kept the tone from being pedantic or overbearing. Many of the articles were so humorous that I actually laughed aloud a few times while reading them—who knew this topic was so amusing?

Because each of the 55 articles is available elsewhere from its original source, is this book really a necessary purchase? This was a question I asked myself many times. At 963 pages and weighing 1.5 kg (3.3 lbs), this book is definitely a tome and required the use of its own tote bag as I lugged it to and from work each day. I do believe that it is a worthy purchase and worth the hassle of carrying it around. These individual articles do not exist together elsewhere and there is a power and relevance in their compilation. In particular, I found reading the sections on theoretical development in citation analysis and the various articles on data validity together and in juxtaposition to one another both illuminating and inspiring.

As scholarly metrics gain more attention from university administrators, faculty members, and academic journal editors, this book will definitely be of use to those involved in this type of work. My own copy is full of highlighted sections, ideas for future research projects, and sticky bookmarks for sections I will look at again. It provides a wealth of information, theories, and methods on measuring research impact, and it would definitely be useful as a course textbook. For those less involved in research metrics, this book is highly recommended for academic library collections and will serve as an excellent resource for those seeking to gain a deeper understanding on citation analysis or scholarly communication.

**Reference**

1. Johnson L, Adams Becker S, Estrada V, and Freeman A. NMC Horizon Report: 2014 Library Edition. Austin, TX: The New Media Consortium, 2014. Available from: <http://cdn.nmc.org/media/2014-nmc-horizon-report-library-EN.pdf>.

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